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09/887,787	06/22/2001	Myung M. Bae	POU920010091US1	7659

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EXAMINER
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PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/887,787

Applicant(s)

BAE ET AL.

Examiner

HUNG Q PHAM

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2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>01/17/02 &amp; 01/17/03</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 01/17/2002 and 01/17/2003 was filed before the mailing date of the first Office Action. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

Regarding to claim 8, the claimed *all of said log file entries are of the same length* was not described in the specification.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**5. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson [USP 6,697,849 B1].**

Regarding to claims 14 and 15, Carlson teaches a logging facility in an application server for logging messages generated by application-level and system-level services (Col. 37-Lines 20-28) by using a user interface for managing message logging, and specifying the types of messages to log. As shown in FIG. 2B (Col. 7-8) is *a central processing unit* (Application Server 108), *a random access memory for storing data and*

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*programs for execution by said central processing unit* (Col. 3, Lines 52-65), *a nonvolatile storage device* (database 110). As shown in FIG. 20, the Message Type field, specifies which types of messages should be logged, includes informational messages, warnings and errors (Col. 37, Lines 30-55). The server may use a log buffer to store messages before they are written to an ASCII file, and/or database logs (Col. 38, Lines 24-26). The buffer is written to an ASCII file when either the buffer interval times out or the number of entries in the buffer exceeds the maximum number allowed (Col. 38, Lines 24-31). When a log file is rotated, the existing log file may be closed and moved to an archive location, and a new log file may be created for recording further log events (Col. 38, Lines 50-57). As seen, a Message Type, such as informational messages, or warnings/errors, specifies *an importance level*, and the ASCII file *receives log file entries having an importance level associated therewith*, and *stores said log file entries in a first plurality of files*. Returning back to FIG. 20, the user interface as in FIG. 20 also indicates the step of *selecting within said first plurality of files a particular file within said first plurality of files*. The ASCII file as in FIG. 20 is selected based on *log event history preservation* as disclosed by Carlson as in Col. 38, Lines 32-40. Carlson does not explicitly teach the plurality of files is on *nonvolatile storage device*. However, as taught by Carlson, when a log file is rotated, the existing log file may be closed and moved to an archive location, and a new log file may be created for recording further log events (Col. 38, Lines 50-57). As seen, an archive location, obviously, is a location on a tape or disk used for long-term storage, or a *nonvolatile storage device*. It would have been obvious

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for one of ordinary skill in the art at the time the invention was made to use a nonvolatile storage for archiving ASCII log file in order to backup the log files.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claims 1-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson [USP 6,697,849 B1] in view of Becker et al. [USP 6,460,049 B1].**

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Regarding to claim 1, Carlson teaches a logging facility in an application server for logging messages generated by application-level and system-level services (Col. 37- Lines 20-28) by using a user interface for managing message logging, and specifying the types of messages to log. As shown in FIG. 20, the Message Type field, specifies which types of messages should be logged, includes informational messages, warnings and errors (Col. 37, Lines 30-55). As seen, a Message Type, such as informational messages, or warnings/errors, specifies *an importance level for a received log entry is determined*. The server may use a log buffer to store messages before they are written to an ASCII file, and/or database logs (Col. 38, Lines 24-26). The buffer is written to an ASCII file when either the buffer interval times out or the number of entries in the buffer exceeds the maximum number allowed (Col. 38, Lines 24-31). As seen, the ASCII file for storing warnings/errors messages is considered as *a first file if importance level is warning and error*, and the ASCII file for storing informational messages is considered as *a second file if importance level is informational*. In different words, the technique of using ASCII files for storing informational, and warnings/ errors messages indicates the step of *storing said received log entry in a first file if said importance level is warnings and errors and in a second file otherwise*. Carlson further discloses that the application server logging facility may be configured to rotate ASCII log files at scheduled time intervals. When a log file is rotated, the existing log file may be closed and moved to an archive location, and a new log file may be created for recording further log events (Col. 38, Lines 50-57). As seen, the storage of a warning/error ASCII file is switched from the existing ASCII log file as *first file* to a corresponding new ASCII file as *alternate first file*

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at scheduled time intervals as *predetermined capacity*, and, obviously, the rotation will occur to replace the existing one at another scheduled time intervals, wherein the file name is still the same, and an informational ASCII file is switched from the existing ASCII log file as *second file* to a corresponding new ASCII file as *alternate second file* at scheduled time intervals as *predetermined capacity*, and, obviously, the rotation will occur to replace the existing one at another scheduled time intervals, wherein the file name is still the same. In short, the rotation of a warning/error ASCII file, and an informational ASCII file indicates the steps of *switching storage from said first file to an alternate first file in response to said first file reaching its predetermined capacity, switching storage from said alternate first file to said first file in response to said alternate first file reaching its predetermined capacity, switching storage from said second file to an alternate second file in response to said second file reaching its predetermined capacity, switching storage from said alternate second file to said second file in response to said alternate second file reaching its predetermined capacity*. Carlson does not explicitly teach *a predetermined threshold* is used as an attribute of the importance level for ranking the received messages. However, as further disclosed by Carlson, messages are categorized into Information message based on status update, and Warning/Error message based on an indication attribute and a critical failure attribute, and a user interface is provided to specify the types of messages to log. Thus, instead of using attributes for categorizing the messages, obviously, a range of consecutive integer, and a predetermined threshold could be used to sort the message. The technique of using a range of consecutive integer to represent the importance level and to determine a threshold for sorting is



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taught by Becker (Becker, Col. 10, Lines 21-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Carlson technique by using a predetermined threshold for categorize the message as taught by Becker in order to let the user define a log file based on a level range of a problem or a critical failure.

Regarding to claim 2, Carlson teaches a logging facility in an application server for logging messages generated by application-level and system-level services (Col. 37- Lines 20-28) by using a user interface for managing message logging, and specifying the types of messages to log. As shown in FIG. 20, the Message Type field, specifies which types of messages should be logged, includes informational messages, warnings and errors (Col. 37, Lines 30-55). As seen, a Message Type, such as informational messages, or warnings/errors, specifies *an importance level for a received log entry is determined*. The server may use a log buffer to store messages before they are written to an ASCII file, and/or database logs (Col. 38, Lines 24-26). The buffer is written to an ASCII file when either the buffer interval times out or the number of entries in the buffer exceeds the maximum number allowed (Col. 38, Lines 24-31). The ASCII log files could be rotated at scheduled time intervals. When a log file is rotated, the existing log file may be closed and moved to an archive location, and a new log file may be created for recording further log events (Col. 38, Lines 50-57). As seen, the received warnings/errors entries are stored in a first pair of files if importance level is warnings and errors, the storage is rotated between these two files at scheduled time intervals as

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*predetermined capacity*, and the received informational entries are stored in a second pair of files if importance level is informational, the storage is rotated between these two files at scheduled time intervals as *predetermined capacity*. In short, the rotation of a warning/error ASCII file, and an informational ASCII file indicates the steps of *storing said received log entry in alternating ones of a first file pair if said importance level is* warnings and errors, *said alternation occurring as each file in the first pair reaches a predetermined capacity*, and *storing said received log entry in alternating ones of a second file pair if said importance level is* informational, *said alternation occurring as each file in the second pair reaches a predetermined capacity*. Carlson does not explicitly teach a *predetermined threshold* is used as an attribute of the importance level for ranking the received messages. However, as further disclosed by Carlson, messages are categorized into Information message based on status update, and Warning/Error message based on an indication attribute and a critical failure attribute, and a user interface is provided to specify the types of messages to log. Thus, instead of using attributes for categorizing the messages, obviously, a range of consecutive integer, and a predetermined threshold could be used to sort the message. The technique of using a range of consecutive integer to represent the importance level and to determine a threshold for sorting is taught by Becker (Becker, Col. 10, Lines 21-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Carlson technique by using a predetermined threshold for categorize the message as taught by Becker in order to let the user define a log file based on a level range of a problem or a critical failure.

Regarding to claim 3, Carlson teaches a logging facility in an application server for logging messages generated by application-level and system-level services (Col. 37- Lines 20-28) by using a user interface for managing message logging, and specifying the types of messages to log. As shown in FIG. 20, the Message Type field, specifies which types of messages should be logged, includes informational messages, warnings and errors (Col. 37, Lines 30-55). As seen, a Message Type, such as informational messages, or warnings/errors, specifies *an importance level for a received log entry is determined*. The server may use a log buffer to store messages before they are written to an ASCII file, and/or database logs (Col. 38, Lines 24-26). The buffer is written to an ASCII file when either the buffer interval times out or the number of entries in the buffer exceeds the maximum number allowed (Col. 38, Lines 24-31). The ASCII log files could be rotated at scheduled time intervals. When a log file is rotated, the existing log file may be closed and moved to an archive location, and a new log file may be created for recording further log events (Col. 38, Lines 50-57). As seen, the received warnings/errors entries are stored in a selected file of a first plurality of files if importance level is warnings and errors, the storage is rotated between these files at scheduled time intervals as *predetermined capacity*, and the received informational entries are stored in a selected file of a first plurality of files if importance level is informational, the storage is rotated between these files at scheduled time intervals as *predetermined capacity*. In short, the rotation of a warning/error ASCII file, and an informational ASCII file indicates the steps of *storing said received log entry in a select file*

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*of a first plurality of files if said importance level is warnings and errors, said selection within said first plurality occurring in cyclic rotation as each file in said first plurality of files reaches a predetermined capacity, and storing said received log entry in a select file of a second plurality of files if said importance level is informational, said selection within said second plurality occurring in cyclic rotation as each file in said second plurality of files reaches a predetermined capacity.* Carlson does not explicitly teach *a predetermined threshold* is used as an attribute of the importance level for ranking the received messages. However, as further disclosed by Carlson, messages are categorized into Information message based on status update, and Warning/Error message based on an indication attribute and a critical failure attribute, and a user interface is provided to specify the types of messages to log. Thus, instead of using attributes for categorizing the messages, obviously, a range of consecutive integer, and a predetermined threshold could be used to sort the message. The technique of using a range of consecutive integer to represent the importance level and to determine a threshold for sorting is taught by Becker (Becker, Col. 10, Lines 21-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Carlson technique by using a predetermined threshold for categorize the message as taught by Becker in order to let the user define a log file based on a level range of a problem or a critical failure.

Regarding to claim 4, Carlson and Becker teaches all the claimed subject matters as discussed in claim 3, but does not explicitly teach the *importance level is*

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*expressed as a desired duration of retention*. However, instead of using status update, indication attribute and a critical failure attribute for categorizing the message, obviously, the level of important could be expressed as duration of retaining the message, for example, a warning message is just an indication and should not be archived for a long period of time. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Carlson and Becker technique by using duration for expressing message in order to archive the log file.

Regarding to claim 5, Carlson and Becker teaches all the claim subject matters as discussed in claim 3, Carlson further discloses *the predetermined capacity for said files in said first plurality of files is the same for all of the files in said first plurality of files* (Carlson, FIG. 20).

Regarding to claim 6, Carlson and Becker teaches all the claim subject matters as discussed in claim 3, Carlson further discloses *the predetermined capacity for said files in said second plurality of files is the same for all of the files in said second plurality of files* (Carlson, FIG. 20).

Regarding to claim 7, Carlson teaches all the claim subject matters as discussed in claim 3, Carlson further discloses the step of *generating a report from a plurality of log file entries retrieved from one of said first or second plurality of files in the same time order in which the log entries were stored* (Carlson, Col. 38, Lines 32-40 and 50-64).

Regarding to claim 8, Carlson and Becker teaches all the claim subject matters as discussed in claim 3, Carlson further discloses *all of said log file entries are of the same length* (Carlson, FIG. 20).

Regarding to claim 9, Carlson and Becker teaches all the claim subject matters as discussed in claim 3, Carlson further discloses *the number of files in said first plurality of files is two* (Carlson, Col. 38, Lines 50-64).

Regarding to claim 10, Carlson and Becker teaches all the claim subject matters as discussed in claim 3, Carlson further discloses *the number of files in said second plurality of files is two* (Carlson, Col. 38, Lines 50-64).

Regarding to claim 11, Carlson and Becker teaches all the claim subject matters as discussed in claim 3, but does not explicitly teach *the number of files in said first plurality of files is the same as the number of files in said second plurality of files*. However, as discussed in claim 3, when a log file is rotated, the existing log file may be closed and moved to an archive location, and a new log file may be created for recording further log events (Col. 38, Lines 50-57). Thus, by using two files, existing log file and a new log file when the existing one moved to an archive location, and warnings/errors log file is the same with informational log file. Therefore, it would have been obvious for one

of ordinary skill in the art at the time the invention was made to include the feature of number of files into the Carlson method in order to manage message logging.

Regarding to claim 12, Carlson and Becker teaches all the claim subject matters as discussed in claim 3, Carlson further discloses *the number of distinct importance level is two* (Carlson, Col. 37, Lines 30-45).

Regarding to claim 13, Carlson and Becker teaches all the claim subject matters as discussed in claim 3, Carlson further discloses *log file entries include a time stamp* (Carlson, Col. 38, Lines 32-40).

Regarding to claim 16, Carlson teaches a logging facility in an application server for logging messages generated by application-level and system-level services (Col. 37- Lines 20-28) by using a user interface for managing message logging, and specifying the types of messages to log. As shown in FIG. 20, the Message Type field, specifies which types of messages should be logged, includes informational messages, warnings and errors (Col. 37, Lines 30-55). As seen, a Message Type, such as informational messages, or warnings/errors, specifies *an importance level for a received log entry is determined*. The server may use a log buffer to store messages before they are written to an ASCII file, and/or database logs (Col. 38, Lines 24-26). The buffer is written to an ASCII file when either the buffer interval times out or the number of entries in the buffer exceeds the maximum number allowed (Col. 38, Lines 24-31). The ASCII log files could

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be rotated at scheduled time intervals. When a log file is rotated, the existing log file may be closed and moved to an archive location, and a new log file may be created for recording further log events (Col. 38, Lines 50-57). As seen, the received warnings/errors entries are stored in a selected file of a first plurality of files if importance level is warnings and errors, the storage is rotated between these files at scheduled time intervals as *predetermined capacity*, and the received informational entries are stored in a selected file of a first plurality of files if importance level is informational, the storage is rotated between these files at scheduled time intervals as *predetermined capacity*. In short, the rotation of a warning/error ASCII file, and an informational ASCII file indicates the steps of *storing said received log entry in a select file of a first plurality of files if said importance level is warnings and errors, said selection within said first plurality occurring in cyclic rotation as each file in said first plurality of files reaches a predetermined capacity*, and *storing said received log entry in a select file of a second plurality of files if said importance level is informational, said selection within said second plurality occurring in cyclic rotation as each file in said second plurality of files reaches a predetermined capacity*. The purpose of warning/error ASCII file, and informational ASCII file is *to preserve log event file histories as long as possible* (Col. 38, Lines 32-40 and 54-56). Carlson does not explicitly teach *a predetermined threshold* is used as an attribute of the importance level for ranking the received messages. However, as further disclosed by Carlson, messages are categorized into Information message based on status update, and Warning/Error message based on an indication attribute and a critical failure attribute, and a user interface is provided to specify the



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types of messages to log. Thus, instead of using attributes for categorizing the messages, obviously, a range of consecutive integer, and a predetermined threshold could be used to sort the message. The technique of using a range of consecutive integer to represent the importance level and to determine a threshold for sorting is taught by Becker (Becker, Col. 10, Lines 21-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Carlson technique by using a predetermined threshold for categorize the message as taught by Becker in order to let the user define a log file based on a level range of a problem or a critical failure.


### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 703-605-4242. As of October 21, 2004, new number should be (571) 272-4040. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 703-305-9790. As of October 21, 2004, new number should be (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Hung Pham  
September 22, 2004

  
SHAHID ALAM  
PRIMARY EXAMINER